CATALOGUE

OF THE

GEOLOGICAL SPECIMENS,

COLLECTED, ON THE LATE SURVEY OF THE STATE OF OHIO,

By W. W. MATHER, STATE GEOLOGIST.

February 25, 1842.

EXECUTIVE OFFICE,

Columbus, February 26, 1842.

The Speaker of the House of Representatives:

Sin: I transmit, herewith, the report of Dr. Mather, the gentleman employed, under an act of the last session, to arrange the geological specimens heretofore collected.

I suggest to the legislature the propriety of printing copies of the catalogue, to be sent out with the sets of specimens intended for distribution.

Respectfully submitted, THOS. CORWIN.

REPORT.

COLUMBUS, February 23, 1842.

To His Excellency, THOMAS CORWIN:

Sin: I have labelled the specimens collected on the geological survey of the State. The cabinets for the colleges are in boxes, ready for distribution to the different literary institutions, in accordance with the law authorizing the geological survey.

There are nine suites for distribution. Two suites are retained for the State cabinet, one of which is displayed in cases with glazed fronts, in the rooms prepared for the reception of the cabinet; and every specimen has its label, giving its name and location—and, generally, the name of the owner, the number of the lot, section, township, and range where it was found; and the labels are pinned either directly over or in front of the specimen to which it belongs. This suite is arranged geographically, by counties, each kind of mineral by itself, shewing specimens of the same from different localities.

The other State collection is in boxes, because there are no cases prepared to receive it, and there are no funds appropriated to furnish the cases. It was intended to display this cabinet like the other, and to have it arranged by a systematic arrangement, so that any particular kind of mineral or rock could at once be found and examined. It is considered desirable to have this arrangement made, to facilitate reference to the specimens.

A tabular condensed catalogue of all the suites of specimens is herewith submitted. This gives the locality, and, generally, the lot, section, township and county of each specimen, and shews at a glance in which, and in how many, of the collections, each kind of mineral or rock for each locality is contained. On the labels of the specimens for the colleges, the particular localities are not always mentioned; and sometimes where they are, they are not always exact. Corrections have been made on the catalogue, and they are now believed to be all correct. By means of the letters and numbers on the top of the labels, and the corresponding ones on the catalogue, the corrections in the

college collections can be made. The particular localities of many of the specimens of Licking and Muskingum counties could not be procured, as the original note book of Col. Foster, who collected them, has been lost. It is not among the records of the geological survey, and Col. Foster cannot find it among

his own papers.

The duplicate suite of the State collection, intended for systematic arrangement, is packed in five boxes, and deposited in the geological rooms in the rear of the old court house. An expenditure of \$120 to \$150 for cases, is necessary before this collection can be arranged or displayed; and three or four weeks labor would be required to prepare it for exhibition in the same style as the other. It is believed to be important to display it as a means of reference, so that our citizens may refer to it, and

compare specimens that they may think valuable.

There are many specimens of ores, minerals, soils, mineral waters, and other things in the State collections, that were sent with particular requests to have them analyzed; and even during the few weeks I have been here this winter, many specimens have been brought to me, with similar requests, that they might know whether they were valuable or not. The one from Clinton county, which is said to contain tin, is one of these; and, if it does contain that metal, it is of high importance to ascertain it, as the ore is said to be very abundant. It does not seem probable, either from its appearance or geological position, that it does contain it; still, it is asserted that it actually yields near thirty per centum of that metal. The expense of analyzing these various minerals, and exploring the localities, is trifling, when compared with their importance to the interests of the community. The geological office might be kept open; specimens, brought from various parts of the State, be examined and analyzed; and information given to the persons interested, without any imposition—information upon which they could depend as accurate; and the geological survey be progressing on a moderate scale, at an expense not exceeding \$3,000 per annum, including all the expenses of the laboratory, analysis, traveling, and all incidental expenses.

The expenses of preparing the cabinet have been more than was contemplated, and have been increased by contingencies over which I have had no control. When I came here, in July, to put up the cabinet, the room that had been prepared for it, had been assigned necessarily for other uses; and the rooms that were then assigned, were not then in a situation to be used. I, therefore, rather than wait for them to be prepared, took the specimens home with me to label, and was occupied during a portion of the time, as a relaxation from my other duties to an-

other State, for a period of three months, in labelling and preparing the specimens for the State and College cabinets; and during a large portion of this time, one person was continually employed in unpacking, distributing, putting on labels, wrapping and repacking the specimens, and another to write the labels, under my direction. On my return here, on the last of October, with the specimens, the rooms that had been fitted up for the cabinets, were occupied necessarily by the Secretary of State, in packing and distributing the State laws, which caused another detention; and when they could be occupied by the State collections, it was found that the cases were not of sufficient capacity to contain them. Specimens were put up, so far as could be, and more cases ordered, and they were not prepared to receive the specimens until January. Since that time I have been engaged in putting it up, and now four more cases are required to display the cabinet that yet remains in boxes. I feel called on to make this explanation, in consequence of the long time that has elapsed since it was supposed the State collections would be open for the inspection of the public.

I have the honor to be, sir,
Your obedient servant,
W. W. MATHER.

CATALOGUE of the specimens collected on the Geological Survey of Ohio, from the few counties in which examinations were made.

if sp		Name and American State of the	Letter and number of the boxes of the collections.													
Letter or No. of specimen.	Collector.	Name and locality of the specimens.	A	В	С	D	E	F	G	Н	I	К	L	M	N	
	Dr. Locke,	Compact gray limestone from the marly layers cliff limestone, near Troy, Ohio,	1 1	1	1	1	1	1	1	1	1	1	1	1		
B	"	"Califerous sandstone," 15 or 20 feet below soft limestone, 2 miles south of Eaton, Preble county, Yellowish granular foss limestone, Partridges quarry, 3 miles from Dayton,	1	1	1	1 1	1 -	_	-	-	_	1	1 -	1 -		
$\tilde{\mathbf{D}}$	"	Limestone over lying the quarry stone of Tryback's quarry, 5 or 6 miles above Dayton,	1	1	1	1	1	1	1	-	-	_	-	-		
E	66	Granular limestone 15 feet above the marl, and below the Dayton stone, from the cliff's n. of Dayton, Calamopora spongites, Radcliff's quarry, Preble county,	1	1 1	1	1	1 _	1 -	1 -	1	1	1	1	1		
$\frac{\mathbf{F}}{\mathbf{G}}$	44	Marly clay at North Bend, deep cut of White Water Canal,	1	1	1	1	1	1	1	1	1	1	1	1		
II	"	Greenish argillaceous limestone upper part of the quarries, Madison, Indiana,	1	1	1 1	1	1	1	1	1	1	1	1	1		
$\begin{bmatrix} 1 \\ 3 \end{bmatrix}$	"	Silicious limestone from the quarries, Madison, Indiana, Impure limestone, top of the hill, West Union, Adams county, Ohio,	1	1	1	1	1	1	1	1	1	1	1	1		
A B	•6	Calcareous sandstone, Mr. Lee's farm, West Union, Adams county,	1	1	1	1	1	1	1	1	1	1	1	1		
C	"	Calcareous sandstone, from the quarry east of West Union, Adams county, Compact gray limestone, Darlington's quarry, West Union, Adams county,	1	1	1 1	1 1	1	1 1	1	1	1	1	1	1		
D E	- "	Impure limestone top of Split Rock hill, southeast of the forge on Brush creek, Adams county,	i	i	1	1	i	i i	i	î	1	1	1	î		
F	"	Chert (vellowish) from the bed of a creek 6 m. w. of West Union. (on the road to Decatur) Adams co.,	1	1 1	1 1	1	1 1	1	1	1	1	1	1	1		-
GH	• •	Limestone, singularly perforated with cavities, 3 miles west of West Union, Adams county, Limestone, containing greenish cherty concretions, overlies the hornstone layer of the cliff limestone,	1	1	1	1	1	1	_	_	-	_	_	_		
17		Brush creek, 2 miles above the force. Adams county,	1	1	1	1	1	1	1	1	1	1	1	1		
1	"	Yellowish (marly) sandstone, top of Sky Hill, 700 feet high, near Brush Creek Furnace, Adams co., Granular limestone from a boulder, I mile east of Decatur, Adams county,	1 1	1 1	1 1	1	1	1	1	1	1	1	1	1		
$\frac{\mathrm{K}}{\mathrm{L}}$	46	Soil (ochreous) from West Union, Adams county,	i	1	1	1	1	1	1	1	1	1	1	1		
M	44	Cyathophyllum from a cornitiferous stratum at the foot of the hill at West Union, Adams county,	1	1	1	1	1]	1	1	1	1	1	1		
A	Briggs,	Calcareous iron ore, coal formation, Athens county, on south fork of Federal creek, 3 mile above Dickey's, Bern township, Athens county,	1	1	1	1	1	1	1	1	1	1	1	1		
В	44	Bituminous coal, coal formation, Dickey's, Bern township, Athens county,	1	1	1	1	1	1	1	1	1	1	1	1		
C	r.	Chert, coal formation, section 16, Lee, Athens county, Argillaceous iron ore, coal formation, section 10, Waterloo, Athens county,	1	1 1	1 1	1 1	1	1	1	1	_	-	_			
E	44	Greenish gray shale, wat formation, hill at Athens, No. 3, descending, Athens county,	1 -	ı	i	1	1	1	1	1	1	1	1	1		
F	44	Gray timestone, coal formation, hill at Athens, No. 2, Athens county, Calcareous carbonate of iron, containing numerous testaceous remains from the coal formation, hill at	1	1	1	1	1	1	1	1	1	1	1	1		
G	**	Athens, No. 11, Athens county,	1	1	1	1	1	1	1	1	1	l t	1	1	i	
н	"	Argillaceous iron ore, from the coal formation, Athens hill, No. 14, Athens county,	1	1	1	1	-	_	-	-	-	-	-	_	!	I
4	46	Stalagmitic carbonate of lime, coal formation, Athens county, Brownish argillaceous iron ore in shale, Athens hill, No. 4, Athens county,	1	1 1	1 1	1 1	1 1	1 1	1	1	1	- 1	1	- 1		1
L	66	Gray fossiliferous limestone, Athens hill, No. 8, Athens county,	ī	1	ī	1	1	i	1	1	i	1	î	1	2	l
M	66	Coarse friable sandstone, Athens hill, No. 18, Athens county,	1	1	1 1	1	1	1	1	1	1	1	1	1		1
N O	66	Greenish sandstone, Athens hill, No. 7, Athens county, Satin spar (thin vein of) in sandstone, Athens hill, No. 16, Athens county,	1	1	1	1	1	1	· 1	1 1	1 1	1	1	1 1	2	
P	"	Greenish gray sandstone, Athens hill, No. 16, Athens county,	1	1	1	1	1	1	1	1	1	1	1	1		
$\frac{\mathbf{Q}}{\mathbf{R}}$	"	Red shale, No. 5, Athens hill, Athens county, Greenish shale, No. 1, Athens hill, (E. to R. section of hill at Athens) Athens county,	1	1 1	1 1	1 1	l 1	1	1	1 1	1 1		1	1 1		1
s	66	Gray compact limestone on Hocking, near the west line of Rome township, Athens county,	1	1	1	1	i	1	1	i	i	i	i	i		
T	"	Fine whetstone grit, Cook's quarry, section 19, near the west line of Rome township, Athens county, Bitumingus coal, 3 miles west of Athens, on Factory Run, Athens county,	1	1 1	1 1	1	1	1	1	1	1	1	1 _	1	3	
U W	. "	Greenish slaty sandstone, used for whetstones, Kirtland quarry, 1 mile south of Athens,	i	1	i	1	1	1	1	_	-	_		_		
X		Limonite, (spongy iron ore) Adam Hewit's, Waterloo, Athens county,	1	1	1	1	1	1	1	1	1	1	1	1		
A	Foster,	Red clay from disintegrated shale, Athens county, Compact gray limestone, Muskingum county,	1	1 1	1	1	1 1	1	1	1	1 1	1 1	1 1	1 1	1	
В	6.	Bituminous coal from near Zanesville, Muskingum county,	1	1	1	1	1	1	1	1	i	i	i	i	•	١
$\begin{bmatrix} \mathbf{C} \\ \mathbf{D} \end{bmatrix}$	"	Gray limestone, from the coal formation, Muskingum county, Calcareo silicious rock, coal formation, Muskingum county,	1	1	1 1	1 1	1 1	1 1	1	1 1	1	1		1		
Ë	6.	Limestone, (dark gray) coal formation, Muskingum county,	1	i	1	1	1	i	1	i	1	1	î	1	i	ł
$\begin{bmatrix} \mathbf{F} \\ \mathbf{G} \end{bmatrix}$		Ferruginous blende, coal formation, Muskingum county, Gray fossiliferous limestone, coal formation, Muskingum county,	1 1	1	1 1	1	1	1	1 1	1	1	1	1	1	1 2	1
п	٠.	Black argillaceous carbonate of iron, coal formation, Muskingum county,	i	i	i	î	1	1	1	1	i	1	1	1	2	١
I	6.	Gray limestone, coal formation, Muskingum county, Encrinal vertebral column, coal formation, Muskingum county,	1	1	1	1	1 !	1	1	1	1	1	1	1	_	
K L		Encrinal column in limestone, coal formation, Muskingum county,	i	1	1	1	1 1	1	1	1	1	1 1	1	1	5	ļ
ļ	66	Encrinal stem in limestone, coal formation, Zanesville, Pentamerus in limestone, coal formation, Zanesville,	1	1	-	-	~	-	-	-	-	_	-	-	1	
	"	Spirifer in limestone, coal formation, Zanesville,	1	-	-	-	-	-	_	-	-	-	_	-	1	
ļ	L. Duigues	Fossiliferous limestone, coal formation, Zanesville,	1	-	-	-	-	-	-	-	-	_	-	_		
	Briggs	Petroleum, Zaney's Oil Spring, near the east line of Crawford county, Lymnea in marl, from the place where the Mastodon was disinterred, near Bucyrus, Crawford county	1 1	1	1	_	-	-	-	_	_	-	_	_	1	
į	61	Planorbis " " " " " " " "	1	i	-	-	-	-	-	-	· _	-	_	_]	
	"	Anadonta "" " " " " " " " " " " " " " " " " "	1 1	-	-	-	-	-	-	-	-	-	-	-		İ
)	66	Lynnea from " " " " "	ĺ	1	1	1	1	1	1	1	1	1	1	1	1	1
ļ	• • • • • • • • • • • • • • • • • • • •	Mineral water, Sliffer's Spring, Annapolis, Crawford county, Mineral water, Kniseley's Spring, Sandusky, Crawford county,	1	1	-	-	-	-	-	-	-	-		-	"	1
A	"	Peat from the alluvial formation, Bucyrus, Crawford county, above the marl containing the Mastodon	1	1	1	1	1	1	1	1	1	1	1	1		1
В	66	Shell marl, from the alluvial formation, same locality,	1	1	1	1	1	1	1	1	Î	1	1	i		1
D		Clay, yellowish (mill race) below the marl, same locality, Bog iron ore, (mill race) opposite side of Sandusky river from Bucyrus, Crawford county,	1	1	1 1	1 1	1	1	1	1	1 1	1	1 1	1 _]
E		Sandstone, section 36, Sandusky township, Crawford county,	1	1	1	1	î	i	i	i	i	1	1	1	-	1
F K	"	Bog iron ore from the alluvial formation, Peter Long's, section 3, Liberty township, Crawford county, Shale from the slate formation, Decker's mill, between Sandusky and Liberty, Crawford county,	1	1 1	1	1 1	1	1 1	1 1	1	1	-	-	-		
M	"	Sog iron ore, Judge Failor's, deposited by chalybeate spring, Crawford county,	i	1	-	-		-	-	-	_1	i	1	1	ĺ	
N O	"	Peat, Bear Marsh, Cranbery township, Crawford county, Clay (blue) from a well in Bucyrus, lies below the yellow clay,	1	1	1	1	-	- .	-	-	-	-	-	-	ļ	1
J	"	Peat, marl & clay, from the surface 9 ft to where the Mastodon was exhumed, near Bucyrus, Crawford co.	8	-	-	-	_T	1	-	' '	1 -	1 -	1	1 -	1	Į
G H	"	Soil, Samuel Gresels—farm yields fifty to sixty bushels of corn per acre, Crawford county.	1	1	1	1	1	1	1	1	1	1	1	1	1	-
2.5	66	Soil cultivated ten years, same farm—yields twenty five to thirty bushels wheat per acre. Soil one and a half miles east of south of Bucyrus, Crawford county, from woodland just cleared,	1	1	1	1	1	1	1	1	1 1	1	. 1	1	1	J

Numb	Letter of spec						1	etter an	ı d num b	er of the	boxes	of the co	llections.	· .			دد د
Number of box.	Letter or No. of specimen.	Name of the collector.	Name and locality of the specimens.	A	В	С	D	Е	F	G	Н	I	К	L	М	N	0
No. 9	A B C D E F G L K A B C D E F G H	Foster,	Gray fossiliferous limestone, from the coal formation, Licking county, Iron stone (carbonate of iron) from the coal formation, Licking county, Ferruginous blende, from the coal formation, Licking county, Fossiliferous limestone, from the coal formation, Licking county, "hornstone, from the calcareo siliceous rock of the coal formation, Licking county, Buhr stone, from the calcareo siliceous rock of the coal formation, Licking county, Quartz crystalized, from the calcareo siliceous rock of the coal formation, Licking county, Cannel coal, underlies the calcareo siliceous rock of coal formation, Licking county, Carbonate of iron, from the calcareo siliceous rock of coal formation, Licking county, Campact gray limestone, Sec. 28, T. 13, R. 16, 3 miles S. E. of Logan, Hocking county, Sandstone, (gray,) used for locks on canal, 3 miles below Logan, Hocking county, Buff colored limestone, upper part of it, 3 miles below Logan, Hocking county, Limonite (iron ore) sec. 23, Fills township, 3 miles below Logan, Hocking county, about one mile N. of the falls of Hocking, Hocking county, Carbonate of iron, loose mass same locality as above, Hocking county, Bituminous coal, from Paines' bed, sec. 3, Swan township, Hocking county, Iron ore, (red per oxide,) Paires' bed, 4½ miles S. W. of falls of Hocking, sec. 31 or 32 of Falls tp.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 4 6 1	unda .e
No 11	I K L M O P Q	66 66 66 66 66 66 66 66 66	Red limestone, from high hill Paines' bed, sec. 26, Swan township, Hocking county, Limonite, (iron ore,) near the W. line of Swan township, on road from Adelphi to Athens, Hocking co. Slaty sandstone, ("limestone,") N. E. Corner of Jackson township, Hocking county, Limonite, (iron ore,) from conglomerate ore bed, Jackson township, Hocking county, Grit, suitable for oil stones, from the calcareo silicious rock, sec. 26, Falls township, Hocking county, Cinder from a furnace, sec. 36, T. 13, R. 15, Athens county, Buff colored sandstone, from the coal formation, i mile from Logan, Hocking county, Fossiliferous sandstone, from quarry? coal formation, Hocking county, Vegetable impressions in carbonate of iron, from the coal formation, sec. 11, T. 11, R. 16, Athens co. Oolitic iron ore, sec. 12, York township, from the coal formation, Athens county, Limestone, conglomerate, Sec. 18, T. 11, R. 15, Waterloo, from the coal formation, Athens county, Blue fossiliferous limestone, land of Mr. Gibbs, near Nelsonville, coal formation, 150 ft. above the coal,	1 1 1 1 1 1 1 1 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 -	1 1 1 1 I I	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1 1 -	1 1 1 1 1	1 1 1 1	1 - 1 1	5 4	
	E FGHKLNOPQRS	66 66 66 66 66 66 66 66 66	Athens county, Kidney iron ore, (carbonate passing into limonite,) from the coal formation, from the hill above the salt well, opposite Nelsonville, Athens county, Bituminous coal, main seam, Nelsonville, Athens county, Gray sandstone, above F., near mouth of Monday creek, Athens county, Shale, above F., at Nelsonville, Athens county, Vegetable remains in iron ore at Whitemore's, Snow fork of Monday creek, Athens county, Iron ore, (limonite,) above the coal at Whitemore's, Athens county, Bituminous coal, contains pyrites, S. W. qr. of sec. 33, Dover township, Athens county, " sec. 20, Dover township, Ewing's salt works, Athens county, Shale from above O., sec. 20, Dover township, Ewing's Salt Works, Athens county, Red peroxide of iron, (rich ore,) sec. 12, Waterloo township, Athens county, Conglomerate of limestone and iron ore, sec. 18, Waterloo township, on Homely's Run, Athens co., Gray limestone, 60 to 70 feet above coal, at Nelsonville, Waterloo township, Athens county,	1 1 1 1 2 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 - 1 1 1 1 1	1 - 1 1 1 1 1	1 1 1 1 1 1 1	1 - 1 1 1 1	1 1 1 1 1	1 - 1 1 1 1 1	en e	
	T U V	" " " " " " " " " " " " " " " " " " "	Blue clay, below the coal, at Whitemore's, Athens county, Calamine and carbonate of iron, from the coal formation, Athens county, White clay, Athens county, Limonite, (iron ore,) from the coal formation, Perry county, Bituminous coal, Perry county, Iron ore, (compact yellow,) Perry county, Slaty sandstone, from Moore's, Waverly sandstone, Scioto county, Radiated nodule of pyrites, sec. 33, Dover township, Scioto county, Waverly sandstone, (fine grained,) near Moore's, 4 miles E. of Portsmouth, Scioto county, Indurated white clay, Pentremite, Silicious iron ore, from the coal formation, Perry county, Argillo ferruginous limestone, (carbonate iron & lime, argillaceous,) from above cannel coal, Licking, Coal plant on sandstone, from Whitemore's, Athens county,	1 1 1 2 1 1 1 1 1 2 1 1 1	1 1	1	1	- I						•		ger (g. v	
		Foster,	" " petrified in sandstone, " four or five miles S. W. of the falls of Hocking, Hocking co. " " " " Hocking county, Ochreous clay, from sec. 10, Scioto county, Multilocular coiled univalve, in limestone—the point of a hill near Gen. Kennedy's, Waverly sandstone, fine grained sandstone, from Scioto county, Silicious iron ore, from "Molly Benton's," Muskingum county, Fossil coal plant, stems large, from near Zanesville, Muskingum county, " " stem and branches in sandstone, Muskingum county, " " " impression of " Muskingum county, " " " " Muskingum county, " " " " " Muskingum county, " " " " " Muskingum county, " " " " Muskingum county,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 - 1 1 1 1 1 1	1 1 1 1 1 1	- - - - - - - 1 1			1 -					
No.8 " " " No.18	A B C D K L P P	Briggs, "" "" "" "" "" "" "" "" "" "" "" "" ""	Bastard limestone above limestone, Port Washington, Tuscarawas county, Sand stone above coal, near lock No. 17, opposite Gnadenhutten, Tuscarawas county, Shale between the sandstone and coal, near lock No. 17, opposite Gnadenhutten, Coal, a little above " " " " from Patrick's, Sandstone from a quarry, near Port Washington, Tuscarawas county, Coal, (Knight's bank,) 2 miles above " Tuscarawas county, Argillaceous soil, from the falls of Broken Sword creek, Crawford county, Peat soil, " " " Crawford county, Peaty argillaceous soil, " " " Crawford county,	1 1 1 1 2 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1	1 1 - 1 1 1 1	- 1 1 - 1 1 1 1 1	- - 1 1 1 1 1	- - 1 1 1 1	1 1 1 1 1 1	- 1 1 1 1	1 1 1 1	1 1 1 1	1 1	•

spe	Name of the	Name and locality of the specimens.					Letter	and nun	nber of	the box	es of the	collectio	ons.		
Letter or No of specimen.	collector.		A	В	C	D	E	F	G	Н	I	к	L	M	. N
A	Briggs,	Carbonate of iron, from the coal formation from shale above B., Tuscarawas county,	Į	1	1 .	1	1	1	1	1	1	1	1	1	_
\mathbf{B}		Limestone, from the coal formation one half mile west of Zoar—overlies coal C. Tuscarawas county,	1	1	1	1	1	1	1	1	1	1	-	-	-
E	- 44	Bituminous coal, from the coal formation one half mile west of Zoar, Tuscarawas county, Pyritous coal, from the coal formation from between the laminæ of C., do do	1	1 1	1	_				1 -	1	1	1 -	1	
F	66	Limestone, from the coal formation 4 mile west of Zoar Furnace, Tuscarawas co.—used as a flux,	1	. 1	1	1	1	- 1	1	1	1	1	_	_	_
G	"	Kidney iron are, (limonite,) from the coal formation (shell are,) 11 miles west of Zoar, Tuscarawas co,	1	1	1 .	1	1	1	1	1	1	1	1	1	10
H	. "	Columnar argillaceous iron ore, from the coal formation from the shale above B., (same as G. but roasted,) Tuscarawas county,	1	1	1	1	1	١,	,	1	1	1	1	1	12 .
K	"	Fossiliferous limestone shale from the coal formation 50 or 60 feet below B., Tuscarawas county,	1	i	1	1	1	1.	1	î	i	1	1	1	1
L	"	Red ochreous clay, from the coal formation near Zoar, . do do	1	1	1	1	1	1	1	1	0	0	0	0	0
M	. "	Iron ore, (sent as copper ore,) from the coal formation from the field above the stone quarry near Zoar, Tuscarawas county,	· 1	1 1	1	1	,	1	1	1	ŀ ,	1	1	1	
N	66	Blue clay, used for pottery, from the coal formation near Zoar, Tuscarawas county,	1	1	î,	1	1	1	1	1	1	i	1	1	_
A	"	Limestone, (impure) near canal, from the coal formation two miles west of New Philadelphia, Tus-	•			_			_				•		
	"	carawas county, Sandstone, one third mile below Heller's, from the coal formation on old Town Creek, Tuscarawas co,	1	1	1	1 -	1	1	1	1	1	1	1	1	_
a B	"	Iron ore, from a bed supposed to be four feet thick, from the coal formation two and three fourth miles	-		•		-	_	_				_		_
		north west of New Philadelphia, Tuscarawas county,	1	1	1	1	1	1	1	1	1	1	1	1	-
b	"	Shale, above the coal at Heller's, from the coal formation on old Town Creek, lot 12, T. 8, R. 2, Tuscarawas county,	1	1	1	1		,	1			1	1	1	
C	66	Iron ore, same farm as B., but a little north, from the coal formation two and three fourths miles north	_	1 - 1	•	,		•	•	'	1	•	•	•	_
_		west of New Philadelphia, Tuscarawas county,	1	1	1	· 1	1	1	1	1	1	1	1	1	-
D	"	Blue limestone, ("hydraulic limestone") same locality, but lower in the hills, from the coal formation two and three fourth miles north west of New Philadelphia, Tuscarawas county,	1	1	. 1	1	1	,	1	1	1	1	1	1	_
E	46	Iron ore, farm of M. Johnson, from the coal formation, township eight, range eight, between sections	•	1 - 1	1	1	1	'	1	•	•	•		•	_
		two and three, Tuscarawas county,	1	1	1	1	1	1	1	1	1	1	1	1	• -
\mathbf{F}	-66	Sandstone, from a quarry on a hill, from the coal formation near Rogersville, Tuscarawas county, Hornstone, (fossiliferous,) loose masses, from the coal formation five or six miles west of Dover, Tus-	ι	1	1 .	1	1	-	_	_	-	-		-	_
-		carawas county,	1	1	1 .		_	_	_	_		_	_	_	_
f	"	Shale, (lossiliferous) from the coal formation of Tuscarawas county,	1	1	1	1	1	1	. 1	1	1 1	1	1	1	3
G	"	Limestone, (fossiliferous) locality of E. near base of hills, from the coal formation in Tuscarawas co, Coal, (bituminous,) one mile west of Rogersville, Tuscarawas county,	1	1	1	I '	1	1	1	1	1 1	1	1	1 1	_
g H	. "	Iron ore, Z. from the coal formation, township nine, range one, lot twenty two, south west quarter of	. •	1	1	1	1 1	1		•	1	•	•	1	_
		township, Tuscarawas county,	1	1	1	1	1	1	1	1	1	1	1	1	2
1	"	Kidney iron ore, from the coal formation, Tuscarawas county, Limestone, (fossiliferous) from the coal formation, Tuscarawas county,	1	_	_	-	-	_	_	-	-	_	-	-	_
K.	"	Sandstone, from the coal formation, three to three and a half miles from New Philadelphia, on road	•	_	-	_	-	_	_	_	-	_	_	_	_
_		to Cumberland, Tuscarawas county,	1	1	1	1	1	1	1	1	1	1	1	1	1
M	"	Slaty iron ore, from the coal formation one half mile south of Fairfield furnace, Tescarawas county, Granular iron ore, from the coal formation, Fairfield township, section fifteen, Tuscarawas county,	1	1 1	1	1	1 1	1	1	1	1	1	1		_
N		Reddish limestone, (fossiliferous) from the coal formation, township ten, range one one mile north of			1	•	^	1	•	•	•	•	_	_	-
		Fairfield furnace, Tuscarawas county,	1	1	1	1	1	1	1	1	1	1	1	1	-
OP	"	Limonite, (fron ore) thick bed used at Fairfield furnace, from the coal formation, Tuscarawas county, Kidney iron ore, (argillaceous iron ore) from the coal formation, from seventy feet below O., Tuscara-	٠.	1	1	1	1	1	1	4	1	1	1	1	2
•	1	was county,	1	-	-	_		-		4	-	-	_	_	_
Q	. 66	Bituminous coal, Blickenderfer's mine, from the coal formation, lot 31, T. 8, range two, on canal, two	1			٠,	1	.	1			1			
R	"	and a half miles below New Philadelphia, Tuscarawas county, Bituminous coal, J. Swihart's bank, section 4, T. 8, range three, four and a half miles south west of Ca-	1	1	1	٠.	1		1	1	1	•	1	1	-
		nal Dover, Tuscarawas county,	1	. 1	1	1	1	1	1	*	1	1	1	1	_
S	. "	Blue Limestone (fossiliferous) from the coal formation, valley of Stone Creek, three and a half to four		1			i					.			
$_{\mathbf{T}}$	"	miles from New Philadelphia, Tuscarawas county, Sandstone, (coarse) Secton's farm, from the coal formation one half mile northeast of New Philadel-	1	* .		1	1	1		1	1	•	1	1	-
		phia, Tuscarawas county,	1	1	1	1	1	1 .	1	1	1	1	i	1	_
V	"	Iron ore, east bank of Tuscarawas, Seaton's farm, from the coal formation, two miles above New	1	.			,								*
w	66	Philadelphia, Tuscarawas county, Iron ore containing triobites, from the coal formation, Tuscarawas county,	1	_	_		1	_	_]	_	_	_	1 -	_
A F	Foster.	Shale, highly carbonized, (almost cannel coal.) from the coal formation, Muskingum county,	ì	1	1	1	1	1	1	1	1	1	1	1 -	12
BC	"	Shale, glazed and highly carbonized, do do do do do Bituminous coal, Lyder's bank, do do do do do	1	1	1	1	1	1	1	1	1	1	1	1	. -
D	"	Concreted carbonate of lime, do do do do do	î	j	i	1	1	1 .	1	7	1	1	1.	1	8
E	44	Fossil plants (impressions of) in shale do do do do do	1	1	i	1	i	1	1	1	-	-	_	-	_
	66	Coal plant impression in sandstone, do do do do do do Limestone, from Vandevest's, section twenty five, Union township, from the coal formation, Muskin-	1	-		-	-	-	- ·	+	-	-		-	=
	1	gum county.	1	_		_			_		_	_	_	_	_
1	46	Balls of iron pyrites, from the coal formation, Muskingum county,	1	1	1	1	1	-	-	4	-	_	_		-
Įv	vv nittlesey	Glazed shale, from the coal formation at Talmadge, Portage county, Shale, with various impressions of plants, from the coal formation, Talmadge, Portage county,	10	1	- 5	- 5	_	2	2	1	1	-	-	-	-
	Foster,	Limestone, (fossiliferous) from the coal formation, Zanesville, Muskingum county,	1	1	1	1	1	1	. 1	. 1	1	1	1	1	_
B	**	Shale, do do do do	1	1	1	1	1	1	1	1 1	. 1	1	1	1	-
D		Bituminous coal; do do do do do Alluvial conglomerate from the cut of the canal at do do do	1	1	1 1	1	1	1	1		1	1	1	1	2
E	, • •	Bituminous coal from the coal formation, do do do	i	i	i	1	4	1	1		1	1	1	1	- 1
F	" (Carbonate of iron; containing carbonate of lime do do do	1	1	1	1	1	1	1	. 1	1	1	1	1	_
H	"	Gray sandstone, from the coal formation, do do Gray sandstone, containing vegetable impressions, do do	1 3	1	1	1	1	1	1	1	1	1 .	1	1	- 1
	* (Carbonized shale (called "cannel coal,") do do	ĭ	1	_	_	_	_	_	Ţ.	_	_ ·	_	_	_
1	"	Upper incisor, of the castor maximus of Foster, (cast of) do do	3	0	-	-	-	-	-	+-	-	-	-	-	-
1	" [5	Limestone, from the the coal formation near Zanesville, do do Sand, from the banks of the Muskingum, do do do	1	1	_	=	-	-	-	- 1		-	-		-
A . B	Briggs,	Bog iron ore, section fifteen, Falls township, land of Mr. Crooks, from the alluvial formation, Hock-	•	-	-	-	-	-	-	-	-	-	-	-	-
		ing county,	1	1	1	-1	1	1	1	1	1	1	1	1	_
\mathbf{B}	"	Argillaceous iron ore, (carbonate of iron,) Bright's land, section one, Falls township, from coal forma-			.,						-				
D	1	tion, Hocking county,						1 1	1			4 '		1	_

Number	Lette of spe							Letter	and num	ber of t	he boxes	of the c	ollection	ıs.			
per of box	Letter or No. of specimen.	Name of the collector.	Name and locality of the specimens.	·A	В	С	D	E	F	G	. н	i	K	L	M	N	
10	D	Briggs,	Kidney iron ore, (argillaceous iron dre,) Star's mill, Little Monday Creek, coal formation, Hacking county,	-1	1	.1	1	1	1	1	1	1	1	1	1	-	
"	E	"	Limonite, (hydrated peroxide of iron,) on Little Monday Creek, section thirty three, township four- teen, range sixteen, three fourths of a mile below D., coal formation, Hocking county, Red sandstone, from the conglomerate, four or five miles above Logan, on road to Lancaster, coal for-	1	1	1	1	1	1	1	1	1	1	1	1,		
: "	F	"	mation, Hocking county, Gray sandstone, from the conglome ate from the coal formation, four or five miles above Logan, on the]]	1		1	1	1	1	1	1	1	1	1	-	
"	G		road to Lancaster, Hocking county, Limonite, (iron ore) land of Thomas Wright, from the coal formation, section twenty, Green township, Hocking county,	1	1	1	1	1	1	1	- 1	1	1 -	1	1	, <u>-</u>	·
	Н	"	Recent or alluvial conglomerate, from the alluvial formation, two and a half miles below Logan, on the canal, Hocking county.	1	1	1	1	1	1	1	1	1	1	1	1	- '	
"	K L	"	Limonite, (iron ore) land of Judge Wright, from the coal formation, section twenty six, Star township, Hocking county, Ferruginous limestone, from the coal formation, section twenty six, Star township, Hocking county,	1	1 -	. 1	1 .	1 -		-		- -	<u>-</u> -	 -	<u>-</u>	<u> </u>	
"	M	. "	Micaceous limestone, one mile below Judge Wright's, from the coal formation, on a branch of Raccoon creek, Hocking county, Limonite, (iron ore) section nine, from the coal formation, Washington township, Hocking county,	1	_ 1	<u>-</u>	-	- 1	-1.	- 1	- 1	<u>-</u>	_ 1	- 1	- 1	-	
' 6 6	O.	"	Bog iron ore, (limonite) from the alluvial formation, section twenty nine, Star township, Hocking county,	1	1	_	-	_	-		_	_	_	_	-	-	
	P Q	. "	Limonite, from high hill, one mile below Judge Wright's, from the coal formation, on branch of Raccoon creek, Hocking county, Blue clay, one and a half miles south of falls of Hocking, from the coal formation on the road to Mc-	1	-	-	-	_	-	. –	-	_	_	_	-	- 1	
44	R	"	Artherstown, Hocking county, Soil (argillaceous) from the coal formation, Hocking county,	1 1	1 1	1 1	1 1	1 1 1	1 1 1	1 1 1	1 1 1	- 1 1	1 1	1	- 1	<u>-</u>	lj.
44	Ā	66	Limestone, (fossiliferous) from the coal formation, Trumbull county, Calamite on sandstone, six miles above Newport, from the north east part of Boardman, Portage county,	1				1	. 1			•	•	•	•	_	ĺ
46	A	66	Bituminous coal, Heller's mine, lot number twelve, township eight, range two, on old Town Creek, Tuscarawas county, Sandstone, (grit stone) six miles above Newport, Tuscarawas county,	1						•				-	,		
7 "	D E	"	Bituminous coal, Emmons' coal mine, one mile above Lockport, Tuscarawas county, Bituminous coal, Weeks' coal bed, near Waterford, do do	1							. ,	•	,			ĺ	
7 7	H L M		Sandy micaceous limestone, from a hill a little east of Waterford, do do do Clay used for potter's ware, from Newport, do	1 1					·							[١
•			Iron ore (limonite) section thirty six, township eight, range eighteen, Jackson county, Hornstone, (fossiliferous) loose masses near Jackson, do do Iron ore, (limonite) section five, township seven, range eighteen, twenty seven to thirty feet above coal,	2	1	1 1	1 1	1 1	1 1	1 1	1	1	1 1	1	1	1	i
			near Jackson, Jackson county, Waverly sandstone, section thirty two, township eight, range nineteen, mill race of J. Clark, Pigeon	1	1	1	1	1	1	1	1	1	1	1	1	1	
			Creek, Jackson county, Limestone, from the mill race of T. Clark, section thirty two, township eight, range nineteen, Pigeon Creek, Jackson county,	1	1	1	1	1	1	1	1	1 1-	. 1	1	1	1	
	A 9		Micaceous limestone, contiguous to coal, on Sugar Camp Creek, two miles from Jackson, towards Athens, Jackson county,	1	1	1 1	1	1	1	1	1	1	1	1	1	1	
	D 9 B 9		Gray limestone, upper part of limestone at Radcliff's, four miles east of Jackson, Jackson county, Argillo ferruginous limestone, on land of Mr. Rice, section fourteen, township seven, range eighteen, Jackson, Jackson county,	1	1	1	1 1	1	1	1	1 1	1	1	1 1	1	1	
	M9 E9 C9		Iron ore, (limonite) probably a little below the mill stone, near Radcliff's, Jackson, Jackson county, Limestone, (lower part of becat Radcliff's) four miles east of Jackson, Jackson county, Ferruginous calc spar in argillo ferruginous limestone, on land of Mr. Rice, two miles east of Jackson.	1	1	1	1 1	1	1	1 1	1	1	1 1	1	1.	1	
	A 10		son, Jackson county, Iron ore, (limonite) below the blue limestone, section thirty two, township ten, range seventeen, Clin-	1	1	1	1	1	1	1	1	1	1	1	1	4	İ
	B 10	i i	ton, Jackson county, Iron ore, (limonite) above the blue linestone, north east of section twenty eight, township ten, range seventeen, Clinton, Jackson county,	1	1 1	1	1	1.	1 1 .	1	1 1	1	1	1	1	1	1
	E 10 F 10 O 11		Loam, from the stratum in which the mastodon bones were found, Jackson township, Jackson county, Marly sandy clay, above the sone stratum, Jackson township, Jackson county, Buhrstone, Lick Rich, Jackson county,	1 1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1	1 1	1 1 1	1	
	P 11 K 11		do (imperfect) "Cysin's querry," section three, south east quarter Clinton, Jackson county, Slaty sand stone, section tweaty two Elk, Athens county,	1	1 1	1 1	1 1	1	1	1	1	i 1	1 .1	1	1	1 1	
	L 11 M 11 N 11		Buhr stone, Musselman's quarry, section six, Elk, Athens county, do Craig's do section nine, north west quarter, Clinton, Jackson county, do Cassel's do section twenty nine, Richland, do do	1 1 1	1 1 1	1 1 1	1 1	1 1 1	1 1 1	1 1	1 1 1	1 1 1	1 1 1	1 1	1 1 1	1 1	
	H 11 G 11 F 11		Hornstone, various colors at the locality, section one, do do do Limestone, light blue, in T. eliven, (fossiliferous) section one, Richland, Jackson county, do blue above D. eleven do do do do do do do	1 1	1	1	1 1	1	1 1	1 1	1 1	1 1	1	1 1	1 1	4 · 1	
	D 11 B 11		do blue, dark, do do do do do do ltron ore, silicious, containing encrinites, above the blue sandstone fifty or sixty feet, near the top of	i	1	1.	1	1	i	1	Î	1	1	1	i.	1	
	A 11 K 10		the Waverly series, sectionnine, Richland, Jackson county, Sandstone, blue, (Waverly series, upper part,) section eight, Jackson county, Clay containing vegetable remans, and overlying F., Jackson township, Jackson county,	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1·	1 1 1	1 . 1	1 1	
A	H 10		Yellowish marly loam, separated from K. by a thin layer of ferruginous sand, Sandstone, fine grained, Wavery series, Jackson county,	1 1	1 1	1 1	1 1	1	1	1 1	1 1	1	1	1 1	1	1 1	
B C	6	66	Grit stone, used for whetstones near Strong's mill, three miles north west of Jackson, Jackson county, Conglomerate, below Strong's nill, three miles northwest of Jackson, Jackson county, Sandstone, of the Waverly series, section six, Richland, do do	1 1	1 1 1	1 1 1	1 1	1 1 1	1 1	· 1	1 1	1 1	1 .	1 1	1 1	1 1	
E M	6 . 12	، د.	Iron ore, section eighteen, township seven, range eighteen, two miles north west of Jackson, Jackson county,	1	1 1	1 1	1	1	1 1	1	1 1	1	1	1	1 1	1	
747	1 12	***	Blue limestone, under the sand tone, at Calvin's quarry, section twenty six, Elk, Athens county,				<u>.</u> 1	<u>.</u>	I				-	1	-,		eat.

Num	of to			Letter and number of the boxes of the collections.											
per of box	r or No	Name of the collector.	Name and locality of the specimens.	A	В	С	D	E	F	G	Н	1	К	L	M
Number of box 12	Letter of No. LKEFGHDCBAEHKABCDEFHOPQ" WVY ABCDEFHABCDEHKLMNP ZAB CHCDEHKLK NO PQ	Briggs,	Sandstone, from Calvin's quarry, section twenty six, Elk, Athens county, do from Calvin's quarry, section twenty six, Elk, do do Bahrstone, from Sisson's do Clinton, Jackson county, "Bastard limestone," section eight, Elk, Athens county, "Bastard limestone," section eight, Elk, Athens county, Shale, ower coul, do do do do do Coal, do do do do do do do do Coal, ment on the burk stone, section thirty, two, Elk, Athens county, Sandstone, from the north west quarter of section thirty two, Elk, Athens county, Sandstone, puper layer, north west quarter of section thirty two, Elk, Athens county, Iron ore, (limenite) from the north west quarter of section thirty two, Elk, Athens county, Iron ore, (limenite) from the north west quarter of section thirty two, Elk, Athens county, Iron ore, (limenite) from the north west quarter of section thirty two, Elk, Athens county, Sandstone, salt rock, Jackson, Jackson county, Carayish limestone, section two, north east part of Lick, Jackson county, Grayish limestone, section two, north east part of Lick, Jackson county, Grayish limestone, section two, north east part of Lick, Jackson county, Carayish limestone, section two, north east part of Lick, Jackson county, Grayish limestone, section two, north east part of Lick, Jackson county, Carayish limestone, section theo, near Recel's mill, Clinton, Jackson county, Can section inneteen, Madison township, Jackson county, Can section inneteen, Madison township, Jackson county, Limestone, under the burk stone, section twenty five, Clinton township, Jackson county, Limestone, under the burk stone, section twenty five, Clinton township, Jackson county, Limestone, under the burk stone, section twenty five, Clinton township, Jackson county, Limestone, under the burk stone, section twenty five, Clinton township, Jackson county, Limestone, under the burk stone, section twenty six, Clinton, Jackson county, Limestone, and the section twenty six, Limestone, under the burk stone, section twenty six, Limestone, Under the substance of the section tw		B 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1		i	1				L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	•		Conglomerate of the gravel beds, (alluvid) beneath, Portsmouth, Scioto county, Wood partially decayed, in the fine blue sand formation under Portsmouth, Scioto county, Pyrites in Waverly sandstone, from the bock at Chillicothe, Ross county, Slate of Scioto and Whetstone, contains the septaria nodules, Worthington, Franklin county, Coralline, from the quarries back of Cincinnati, Hamilton county, Plates of an encrinite in limestone, back of Cincinnati, Hamilton county, Fossil plant, in Waverly sandstone, near Chillicothe, west of the Scioto, Ross county, Hornstone, from the Columbus limestone, Sullivant's quarry, Franklin county, Fossiliferous limestone, from the Dublin quarries, four miles west of Worthington, Franklin county, Sulphate of barytes, from the septaria balls west of Worthington, Franklin county, Alluvial clay, formed at the mouth of the Scioto, Scioto county, Compact limestone, from Duck Creek, east of Marietta, Washington county, Fossiliferous iron ore, near Charles Crulls, Jefferson township, Scioto county, Limestone, (white) John Canter's, section twenty four, Hamilton township, Jackson county, Bitumen, in a ravine above S. Kinnear's, four miles north of Columbus, Franklin county,		1 1 1 1 1 1	1 1 1 1 1 1	1	1	1			•			

Letter of s	N	NT			Letter	and 1	number	of th	e boxes	of Co	llection	ı s.		
Letter or No. of specimen.	Name of the collector.	Name and locality of the specimens.	A	В	С	D	E	F	G	Н	I	к	L	M
		Encrinite, in blue limestone, Muskingum county, Clay, Worthington, Franklin county, Fossil shell, in limestone, near Zanesville, Muskingum county,	1 1 1	i	1									
		Stalactite, Slaty red oxide of iron,	1 1	1	1									
		Calamite impression, Putnam Hill, Muskingum county, Carbonate of iron, Zanesville, Muskingum county,	1 1	1	"									
		Calamine and iron ore, three fourth miles south east of Zanesville, Muskingum county, Productus, in limestone, Cincinnati, Hamilton county, Trilobite (asaphus) in limestone, Sullivant's quarries, Franklin county,	1 1	•						i				
		Cyathophyllum, in limestone, Sullivant's quarries, Franklin county,	1											
		Spirifer, from the ore bed eighteen feet below the mammoth ore bed, Scioto Furnace, Scioto county,	1	1										
F 8		Bituminous coal, Pomeroy mines, Meigs county, Neuropteris in shale, from the Henry coal seam, Buffalo Skull Lick, Jackson county,	1 2	1 2	1 2 2	1 2	"	"	1 "	1	ı	1	1	1
"		Pecopteris, " " " " " " " " " " " " " " " " " " "	2	2	2 1	1	66	"	"	46	**			
"		Calamites " " " " " " " " " " " " " " " " " " "	1	*4	"	"								
"		Lepidodendron, " " " " " " " " " " " " " " " " " " "	1 1		66	"		,						
	1	Fossils, in iron ore, from the level of the mammoth ore bank, Scioto Furnace, Scioto county,	10	5	2	2	46	"						
9 L 9 N	}	Iron ore, silicious, High Hill, section seven, township seven, range nineteen, Pike county, Iron ore, silicious, pebbly, High knob above Wills' saw mill, section thirty four, township eight, range	1		1									
		nineteen, Jackson county, Buhr stone, Jefferson township, Jackson county,	1 1		"	1								
	1	Stalactite, from a gravel bank, do do	1			1					{			
A 10 B 10		Iron ore, below the blue limestone, section 32, township 10, range 17, Clinton, Jackson county, Iron ore, above the blue limestone, section 28, township 10, range 17, Clinton, Jackson county,	1 1											
D 10]	Pentamerus, in gray compact limestone, Lick township, Jackson county,	1											
		Zinc and iron ores, near the coal, from section five, township seven, range eighteen, Jackson county, Iron ore, (limonite) Elk township, Athens county,	1 1		. [
		Iron ore, from loose masses of buhr stone, section nineteen, Elk township, Athens county, Buhr stone, McDougal's quarry, Richland township, Jackson county,	1	1	}									
		Hone stone, from McDougal's oil stone quarry, south west corner of section nineteen, Elk town-		*									•	
		ship, Athens county, Bastard limestone, section eight, Elk township, Athens county,	1 1		1									
:		Sandstone, containing encrinal spines from junction of the Waverly sandstone with the conglomer-	1	٠	"								 	
F,10		ate, section nine, Richland township, lackson county, Marly sandy clay, above the bone stratum, Pigeon branch of the middle fork of Salt Creek, Jackson co	1											
O 10 H 10		Clay, from the bone stratum, Pigeon branch of the middle fork of Salt Creek, Jackson county, Yellowish marly clay or loam, from Pigeon branch of the middle fork of Salt Creek, Jackson county,	1 1		66	1								
n 10		Gneiss, from a boulder,	1 1		"	"								
		Compact limestone, Athens county, Waverly sandstone, containing blende, one and a half miles above Portsmouth, Scioto county,	1 1)									
	:	Hydraulic limestone, near Akron, near the turnpike gate, Portage county, Sandstone, bearing the marks of fire, from thirty feet below the surface, on the banks of the Ohio, at	1	1										
		Portsmouth, Scioto county,	1											
		Iron ore, from Darby Creek, Franklin county, from J. Ridgeway, Pyritous coal, Zanesville, Muskingum county, Calc spar, from Muskingum county,	1 1 1	44	"				<u> </u>		1			
		Encrinite, in limestone of the coal formation, Muskingum county, Plant changed to coal, in sandstone, from the cut of the canal at Zanesville, Muskingum county, Fossil, from limestone near West Union, Adam's county,	1 1 1	"	46									
		Calcareous Tufa, (alluvial formation) Ancient pottery, found near Akron, sent by J. A. Cleveland, Portage county,	1	"	"	66		}		l				
		Gypsum, (crystals of) found near Akron, sent by J. A. Cleveland, Portage county, Decomposed mica slate, found near Akron, said by some mineral rod man to contain gold, Portage co	1											
CW	1	Pentamerus, from the limestone near Springfield, Clark county,	1 1	ii.	"	46	"	"	"	"	46	66	46	
EW8)	Cyathophyllum, do do do do do Orthoceratite, (cast of) do do do Buck Creek, do do	1				,							
c w 34		do do do do Springfield, do do Fossil,(large bivalve) do do do do do	1 1									!		
	1	Pentamerus, do do do do do	2	2	"	"	"	"	"	"	"			
62 60		Atrypa, do do do do do Spirifer, do do do Xenia, Greene do	"	"	"							!		
		Productus, do do do do do	"	"	"				1					
e w 11	1	do do do do do	"			A						_		
g w 9		Cyathophyllum, do do do do do do do do do do do do do	6	4	4	4	3	3	3	2	2	2	2	2
e w 17	<u>'</u>	Leptæna, do do do do do	3	1 2	1 2	1	1	1						
		Spirifer fastigatus, do do do do do Favosite, do do do do do do do	1	z	z									
		do do do do do do Sarcinula, do do do do	"											
e w		Spirifer, do do do do do	"											
e w 27 e w 28		Coralline, do do do do do Calamapora spongites, do do do do do do	"											
	j	Terebratula nuciformis, do do do do do do	3	2	2	2	2	2						
e w 30		do do do do do do do	66						'					
e w 32	2	Madrepora, do do do do do	"	1			<u> </u>				·			1

Numbe	Letter of sp	Name of the	Name and locality of the specimens.]	Letter	and nu	ımber o	of the	boxes o	of the c	ollecti	ons.		=
Number of box	Letter or No. of specimen.	collector.		A	В	С	D	E	F	G ——	Н	I	К	L	M
	e w 6 e w 2		Leptæna internal, cast of, from the limestone near Springfield, Clark county,	1 "	1										
	e w 15		do do do do do do Favosite, from Frankfort, Ky.	2	2										
	e w 39		Chert, from Springfield, Clark county,	1 "	1										
	e w 37		Compact limestone, Springfield, Clark county, Stalagmite, do do do	"				1							
	1		Hornstone, from the limestone of the coal formation, Clinton township, Jackson county,	66	"	.								:	
	2 3		Imperfect buhr stone, from the coal formation, middle fork of Salt Creek, Richland, Jackson county, Fossiliferous iron ore, (limonite) from the coal formation, north end of Richland township, Jackson co.	"											
	4 5		Ferruginous sandstone, from the coal formation, north end of Richland township, Jackson county, Sandstone, (friable) from the coal formation north end of do do do	66			,			İ					ı
	6		Buhrstone, from the coal formation, Sisson's quarry, Clinton township, Jackson county,	"											I
	7		Iron ore, limonite, containing fossils, from the coal formation, Bondurand's ore bed, south east quarter of south west quarter of section fourteen, township seven, range eighteen, Jackson county,	"	"	1	1								ı
	8		Impressions of fossils on sandstone, from the coal formation near Jackson Furnace, Hamilton, Jackson county,	. "											ľ
	9		Impressions of fossils on sandstone, from the coal formation near Jackson Furnace, Hamilton, Jack-			-									
	10		son county, [Iron ore, limonite, thick bed, from the coal formation near Jackson Furnace, Hamilton, Jackson co.	"			•								ļ
	11		Buhr stone, from the coal formation, Jefferson, Jackson county, do containing the atrypa, from the coal formation, Clinton, Jackson county,	"	"										į
	12 13		Black limestone, from the coal formation, north east part of Richland, near A. Leniz, Jackson county,		"	"	"	1	1	1					
	14 15		Cannel coal, from the coal formation, Guilderland's pit, 1 mile north of Jackson Furnace, Jackson co. Bituminous coal, from the coal formation, Guilderland's pit, I mile north of Jackson Furnace, Jackson co.	. "	"	"	"	66 66	"	"	1 "	1 "	1	1	1
	16		Encrinite, in limestone, from a buhr stone quarry, coal formation, Raccoon Creek, Clinton, Jackson co. Limestone, gray and crystalline, Jackson county,	"	"	"	46	66							İ
	17 18		Kidney iron ore, (limonite) from the coal formation, John Canter's section twenty four, Hamilton,												ĺ
	SA		Jackson county, Lignite, in clay, from the banks of the Ohio, at Portsmouth, below the clay formation, Scioto county,	46	"	"	"	66	66	"	"	66	61		
	AEF		Buhr stone, from R. McDougal's quarry, three miles west of McArthurstown, Athens county,	"	"										
	A E F 13 Y		Sandstone, above the coal, Elk township, Athens county, Iron ore, above the buhr stone, Morrison's quarry. Elk township, Athens county,	"	"	"	•6				•				ł
	EEF AEF		Iron ore, roasted, (block ore) from near Clinton Furnace, Scioto county, Limestone, from the coal formation, section twenty seven, Elk township, Athens county,	"	"	"									l
	SWS		Nodules, from the Waverly sandstone, Scioto county,	"	"	"	"								
	sws		do fossiliferous, from the Waverly sandstone, Scioto county, Pyrites, coal formation, Scioto county,	"	66	"	"	"	"						ĺ
	SWS		Ammonites, in a nodule from the Waverly sandstone, Clugman's quarry, Scioto county, do from the Waverly sandstone, Master's quarry, near Portsmouth, Scioto county,	"	"	"	0	0	0						ĺ
	D 10		Encrinites, in a nodule from the Waverly sandstone, Master's quarry, Portsmouth, Scioto county,	"	"	"					,,				ĺ
			Asterophylites, large specimen on shale, Putnam Hill, near Zanesville, Muskingum county, do small specimen on shale, Putnam Hill, near Zanesville, Muskingum county,	" 4	2	4	1 "	1 "	1 "	"	"	66	"	ш	66
			Lepidodendron, on sandstone, from the coal formation, Zanesville, Muskingum county, Calamites, from the coal formation, Putnam Hill, near Zanesville, Muskingum county,	1 2											l
			do and pecopteris, from the coal formation, Putnam Hill, near Zanesville, Muskingum county,	1									,		
			Glazed and red shale, from the coal formation, Grotto of Plants, near Marietta, Washington county, Neuropteris, in red shale, from coal formation, Grotto of Plants, near Marietta, Washington county,	"	1	1	. "	"							
			Pecopteris, in red shale, from the coal formation, Grotto of Plants, near Marietta, Washington county, Pebble, three fourths of a mile south east of Zanesville, Muskingum county,	2	"	"	"	"	"	"	"	44	"	. "	"
			Nodular iron ore, three fourths of a mile, south east of Zanesville, Muskingum county,	"											
			Nodular iron ore, Falls township, Dillon's Furnace, north west of Zanesville, Muskingum county, Compact limestone, Falls township, Zanesville, Muskingum county,	"											ĺ
į	.	ļ	Fossil plant on shale, Putnam's Hill, Muskingum county, Conglomerate, from gravel banks near Zanesville, Muskingum county,	"	í										
			Sandstone, slaty and micaceous, from the coal formation, Zanesville, Muskingum county,	"	"	"	"								
			Pecopteris on shale, Putnam's Hill, Zanesville, Muskingum county, Pebbles of iron ore, three fourths of a mile south east of Zanesville, Muskingum county,	2 8			•								
			Cyathophyllum, Flint Ridge, Falls township, Muskingum county, Gorgonia, Putnam's Hill, Muskingum county,	1 "	"	٠,٤									ĺ
			Spirifer, do do do do	"	66 66	"									
			Encrinal impression, Putnam's Hill, Muskingum county, do spine, Licking county,	"											1
			Spirifer, do Spirifer, various corallines in limestone, Putnam's Hill, Muskingum county,	"											İ
			Spirifer, Licking county,	"											ĺ
			Fossil shell in argillaceous iron ore, Licking county, Fossiliferous limestone, Zanesville,	"	"	"		*							
			do do Licking county, Decomposed septaria, Putnam's Hill, near Zanesville,	"											į
	1 E F	ĺ	Sandstone, from the base of the hill, at the Wildcats den, Elk township, Athens county,	"	"	"		,							
	4 E F 5 E F		Shale, sixty feet thick, at the Wildcats den, Elk township, Athens county, Iron ore, from the shale, at the Wildcats den, Elk township, Athens county,	"	"	"	16	. "		ļ			ļ		
	6 E F 7 E F		Limestone, from the lower part of the quartz rock, at the Wildcats den, Elk township, Athens county, Quartz rock, from the upper part of the quartz rock, at the Wildcats den, Elk township, Athens co.	"	"										<u> </u>
•	8 E F		Iron ore, (limonite) resting on the upper part of the above, at the Wildcats den, Elk township, Athens co.	"	"						1				
	9 E F 11EF		Sandstone, over the quartz rock, at the Wildcats den, Elk township, Athens county, Silicious iron ore, from the upper part of the bed, at the Wildcats den, Elk township, Athens county,	"	"	"									
			Gorgonia, in buhrstone, Flint ridge, Hopewell, Muskingum county, Calcareous spar, in buhrstone, Flint ridge, Hopewell, Muskingum county,	"	"			İ							
			Pentamerus, in do do do do	"	"						•				
	[Encrinal remains, in buhrstone, Flint ridge, Hopewell, Muskingum county, Hornstone, Flint ridge, Hopewell, Muskingum county,	"	"	"	"	"	"	"	"	ļ			
															سيبت

Letter or No. of specimen. Number of box	Name of the collector.	Name and locality of the specimens.							boxes o					
			A	В	c	D	E	F	G	H 	I	К	L ——	M
		Cyathophyllum, in buhrstone, Flint ridge, Hopewell, Muskingum county, Buhrstone, Flint ridge, Hopewell, Muskingum county, Crystallized quartz, from buhrstone, Flint ridge, Hopewell, Muskingum county, Calcareous carbonate of iron, (passing into limonite) near Dillon's forge, Falls township, Muskingum co. Blende and calamine, in nodular iron ore, coal formation, Putnam Hill, Muskingum county, Oolitic iron ore, coal formation, Putnam Hill, Muskingum county,	1 " " " "	1	1	1 "	1	1	1	1	1	1		
		Spirifer in limestone, coal formation, near Zanesville, Muskingum county, Limestone containing various fossils, north of the river road, three miles north west of Columbus, Franklin county, Argillo ferruginous limestone, part of a large nodule of septaria from the slate, one mile north west of Worthington, Franklin county, Brown spar, from the centre of a large nodule of septaria from the slate, one and a half mile west of Worthington, Franklin county, Atrypa, (several species) from the white limestone, of the coal formation, near Clinton furnace, Scioto co. White earth, found under the calcareous iron ores, at Clinton furnace, Scioto co. (Please analyze this.) Nodule of iron ore, from the Clinton furnace, Scioto county, Fossil shell, from the slate formation, Encrinal spine, from the limestone of the coal formation, Clinton Furnace, Scioto county,	"	13	5	4	3	3	3	3	3	3	3	3
		Pentamerus, from the limestone of the coal formation, Clinton furnace, Scioto county, Fossiliferous, decomposed impure limestone, Licking county, Encrini and spirifers, in Waverly sandstone, Granville, Licking county, Productus, Licking county, Lepidodendron, on sandstone, Zanesville, Encrinite, in limestone, Zanesville, Vegetable impression on slate, of the slate formation, four miles north of Columbus, near S. Kinear's, Iron and Plumbago, from the seams of the hearth of the Scioto furnace, Scioto county,	" " " " " " " " " " " " "	" 0	1									
		Clay, Newark, Licking county, Peat muck, containing the fossil bones, a half mile north of Nashport, Licking county, Pecopteris, on sandstone, Ohio, Fossils, unknown, on Waverly sandstone, Brigg's quarry, two miles above Portsmouth, Scioto co. Fossils, unknown, in clay and sand, next the alluvial conglomerate, Portsmouth, Scioto co. Orthoceratite, changed to sulphate of strontia, in a nodule of Waverly sandstone, Briggs quarry, two miles above Portsmouth, Scioto county, Encrinal stem, Brigg's quarry, two miles above Portsmouth, Scioto co. Blende, in a nodule of Waverly sandstone, Brigg's quarry, two miles above Portsmouth, Scioto co.	" 2 1		66									
W 101		Ammonites, impression in Waverly sandstone, Brigg's quarry, two miles above Portsmouth, Scioto co. Shale, Stephenson's mine, in a ravine, opposite Stewart's mill, Poland, Trumbull county, Pecopiteris, on coarse sandy shale, roof of A. Whittlesey's coal mine, Talmadge, Portage county, Coke, from the coal of D. Upson's mine, Talmadge, Portage county, Coke, from the Brownsville coal, Columbus marble, Sullivant's quarry, Franklinton,	66 66 66 66 66											
		Fibrous gypsum, Portage, Sandusky county, Calc spar, in iron ore, near Dillon's forge, Falls township, Muskingum county, Fossil plant, impression on shale, Talmadge, Portage county, Spirifer, in buhrstone, Flint ridge, Hopewell township, Muskingum county, Chalcedony, in buhrstone, Flint ridge, Hopewell township, Muskingum county, Cyathophyllum, in buhrstone, Flint ridge, Hopewell township, Muskingum county,	66 66 66	ee ee	"									
		Encrinite, in buhrstone, Flint ridge, Hopewell township, Muskingum county, Buhrstone, Flint ridge, Hopewell township, Muskingum county, Quartz crystalized, in buhrstone, Flint ridge, Hopewell township, Muskingum county, Sulphate of barytes, from buhrstone, Flint ridge, Hopewell township, Muskingum county, Coal plant, changed to iron ore, four miles west of Clinton furnace, Scioto county, Septariated iron ore, on the road from Jackson to Piketon, Jackson county, Zinc, and iron ore, (to be analyzed) Jackson county, Zinc, and iron ore, (to be analyzed) Putnam Hill, Muskingum county, Fossil, from the ore beds near Clinton Furnace, Scioto county,	66 66 66 66 66 66	"	••	1								
		do bivalve, (pholadomya elongata) Clinton Furnace, Scioto county, do univalve, do atrypa, (pholadomya elonagata) do spirifer, do shells in iron ore, (pholadomya elongata) do stem of a plant, Iron ore, (limonite) Mr. Snodgrass, Hamilton township, Jackson county, Black fossiliferous limestone, Clinton township, Jackson county,	66 66 66 66 66	66 66 66	۲٤ ۲٤	"	44							
E 11 C 14 K 12		Chert, Lick township, Jackson county, Silicious nodules, section four, Lick township, Jackson county, Ferruginous shale, Iron ore, (limonite,) one half mile north of Cuswing's tavern, Logan, Hocking county, Fossiliferous iron ore, two and a half miles east of Lucasville, Scioto county, Sandstone, Calvin's quarry, coal formation, section twenty six, Elk, Jackson county,	" " 8	- 1 8 1	" " 4	" " 3	3 1	2	2					
M 12		Limestone, below the sandstone of Calvin's quarry, Elk township, section twenty six, Silicified vegetable remain, from the shales of the Henry coal seam, two miles north west of Jackson, Jackson county, Conglomerate, at the base of the coal formation, four and a half miles north west of Jackson, Jackson co. Fossil shell, in a nodule of iron ore, in the Waverly sandstone, Liberty, Jackson county, Vegetable remains, in a nodule of iron ore, in the Waverly sandstone, Liberty, Jackson county,	"	"	"	"	ı							
O 13 L 13 E 6 K 13 E 12		Fossils, of the upper layers of the Waverly sandstone, five miles north west of Jackson, Jackson co. Chert, from the limestone, Jackson county, Iron ore, from section sixteen, Washington township, Jackson county, Iron ore, two miles north west of Jackson, Jackson county, Iron ore, section twenty eight, on a high ridge, abundant, Washington, Jackson county, Buhr stone, south east quarter of section three, Clinton, Sisson's quarry, Jackson county,	4 1 " " " " " " " " " " " " " " " " " "	" " 0 1	3 1	"	"							

Mark on					Letter	and n	umber	of the	boxes	of the	collection	ns.		
the label.	Name and locality of the specimens.	A A	A	В	C	D	Е	F	G	Н	I	К	L	M
D "	Buhr stone, south east qr. of sec. 3, Clinton, Sisson's quarry, lies below the good buhr, Jackson co., Blue limestone, section one, Richland township, Jackson county, Gorgonia, in Radcliff's limestone, section one, township six, range eighteen, Jackson county, Pentamerus, from Radcliff's limestone, section one, township six, range eighteen, Jackson county,	,	1	1 "	1 2	1	1	1	1	1				
"	Fossil shells, from do do do do do do do Calamites, in shale, above the coal, at the upper part of the bastard limestone, section 8, Elk, Athens co. Impressions of from the upper part of the bastard limestone, section 8, Elk township, Athens co. Impressions of on iron ore, top of the bastard limestone, section 8, Elk township, Athens co. Calamite, from the sandstone, Zanesville, Muskingum county, do from near Marietta, Washington county, Fossil plant impression, near Marietta, Washington county,		2 1 2 1	2 1 "	3 1 2 1 "	66	"	"	"	66		"	1	1
	Fossiliferous iron ore do do do do Sandstone, of the coal formation, two miles west of Marietta, Washington county, Productus, Marietta, Washington county, Fossil plants, in ferruginous limestone, section eight, Elk township, Athens county, Vegetable impression in sandstone, between conglomerate and Waverly series, five miles north west of		1	"	"	"							,	
	Jackson, Jackson county, Nodular iron ore, containing blende, Zanesville, Muskingum county, Argillaceous carbonate of iron and lime, do do do Mineral charcoal, in black shale, do do do Part of a plant changed to coal, from the sandstone in the cut of the canal, Zanesville, Muskingum co.		ee ee ee	"	66									
	Encrinite stem, productus, spirifer, pentamerus, terebratula, and another fossil from the limestone at Zanesville, Muskingum county, Silicified favosite, from the limestone at Zanesville, Muskingum county, Lepidodendron, Joe's Run, near Dillon's Furnace, Hopewell township, Muskingum county, do Zanesville, Muskingum county,	1	0 . 1 "	9 1	"									
	Coal, in contact with limestone, Putnam Hill, Muskingum county, Argillaceous iron ore, (impure) mined for Dillon's Furnace, Falls township, Muskingum county, Vegetable impression, Zanesville, Muskingum county, do do on shale, three fourths of a mile south east of Zanesville, Muskingum county, Limestone, of the coal formation, Putnam, do do Gorgonia, in the coal formation, three fourths of a mile south east of Zanesville, Muskingum county,		14 14 14 14	66										
	Orthoceratite? in the sandstone from the coal formation, Zanesville, Mineral charcoal, in sandstone, from the coal formation, do do do in shale, from the coal formation, do Pecopteris in shale, Putnam Hill, near do do do do do do		" 4 4	3	" 3 3	2 2	2 2	2 2	2 2	2 1	2 1	2 1	2	2 1
W 3	Eleven species not recognized, from Putnam Hill, near Limestone, (fossiliferous) stray fragment, one mile down the creek from Parkman, Geauga county, Orthocera, and other fossils, in black shale, Stephenson's coal mine, Canfield, Trumbull county, Limestone, (compact) from Adam Symms' farm, from the north west corner of Canfield, Trumbull co. do blue, (compact) from Yellow creek, Poland, Trumbull county,	,	1	4	2	2	1	1	1	"	"	44		
W 5 W 7 W 8 W 9	do black, containing the Leptæna, overlies the coal near number three, Canfield, Trumbull co. do (argillaceous) nagelkalk, found along the Yellow creek, Poland, Trumbull county, do blue, (compact) lots Nos. 18 and 19, Youngstown, Trumbull county, Coal, (bituminous) 4½ feet thick, from the coal formation, Dunn's mine, Youngstown, Trumbull county, Coal, (bituminous) second quality, from the coal formation, Moore's mine, lot 30, Brookfield, Trumbull co.	6	ic c	ee ee ee	" " " "	"	"	"	"	"	u	66	"	ec.
W 10 W 11 W 12 W 13	Waverly sandstone, containing fossils, on Big Brook, in the south east part of Orange, Cuyahoga co. Waverly sandstone, containing fossils, on Big Brook, at Drew's saw mill, Orange, Cuyahoga county, Iron stone, from the Waverly sandstone, on Big Brook, near the mouth, Orange, Cuyahoga county, Iron stone, in shale, of the slate formation, Chagrin Falls, Cuyahoga county, Coal, (bituminous) from Adam Symms' farm, Canfield, Trumbull county,	6	: 6 : 6 : 6 : 6	46			"							
W 15 W 16 W 17 W 18 W 19	Iron ore, from the coal formation, Hubbard, Trumbull county, Iron ore, (argillo silicious) coal formation, Hubbard, Trumbull county, Conglomerate, from the coal formation, roof of Moore's coal mine, lot 30, Brookfield, Trumbull county, Conglomerate, from the coal formation, floor of Moore's coal mine, lot 30, do do do Cannel coal, from the coal formation, A. Cone's farm, lot 23, Hartford, do do Iron ore, (silicious) from the coal formation, below the coal, at J. B. Curtis's mine, lot 86, Brookfield,	6 6	: 6 : 6 : 6 : 6	66 66 66	cc cc cc	ee ee	66	"					•	
W 21 W 22 W 24	Trumbull county, Ferruginous sandstone, (called iron ore) ten feet above coal, Hubbard, Trumbull county, Argillaceous iron ore, below the coal, five miles south east of Sharon, Pennsylvania, Sandstone, dark colored, and containing remains of plants, Reeder's coal mine Brookfield, Trumbull co. Argillaceous iron ore, with brown spar, overlies the coal at Mary Campbell's mine, one and a half mile north east of Youngstown, Trumbull county,	6	: (: (: ("	66	66	"	٤,	درين کارون دادند					
28 29 30 31	Limestone, gray and fossiliferous, 25 feet thick, coal formation, lot 55, Poland, Trumbull county, do containing fossils, 2 feet thick, coal formation, lot 55, Poland, Trumbull county, Carbonate of iron, Jacob Gwin's farm, lots 12 and 13, Youngstown, Trumbull county, Micaceous sandstone, made into grindstones, lot 55, Poland, Trumbull county, Limestone 2 feet thick, limestone of the coal formation, lots 12 and 13, Youngstown, Trumbull county, Productus, from the limestone, of the coal formation, lots 12 and 13, Youngstown, do do	ء ، ،	6 6 7	6; 66 66	ee ee	66								 - - -
32 3 3	Nagelkalk, from the limestone, of the coal formation, lots 12 and 13, Youngstown, do do Limestone, from the coal formation, lots 12 and 13, Youngstown, Trumbull county, Hornstone, from the above limestone, lots 12 and 13, do do do	9	2	"	"	46	66	"	••	"				
36 3 7	Limestone, (blue) probably same stratum as 4 and 4, Poland, Trumbull county, Fossils from the above limestone, Poland, Trumbull county, Ferruginous limestone, lots 12 and 13, (probably will make cement) Youngstown, Trumbull county, Carbonate of iron, above limestone, lots 5 and 6, Austintown, Trumbull county,	9		"	"	- 66							· •	
39 40	Limestone shale, with fossil remains, Austintown, Trumbull county, Carbonate of iron, underlies limestone No. 31, Youngstown, Trumbull county, Limestone, below 38, on A. McMiller's land, lots 5 and 6, Austintown, Trumbull county, Calcareous spar, from above, Trumbull county,	66 66 66		" " "	"									

Mark or	Name and locality of the specimens.			Letter	and n	umber	of the	boxes	of the	collect	ions.		
the label	reading and locality of the specimens.	A	В	С	D	Е	F	G	Н	I	К	L.	M
42 43	Chert in loose masses, north west part of Poland, Trumbull county,	1	1										
44 45 46	Limestone, lot No. 82, Freedom, Portage county, Argillo ferruginous limestone, F. Wadsworth's land, one half mile above the saw mill, Edinburgh, Portage county,	"	"	1 "	1	1	1						
49	Calcareous sandstone, detached masses, one half mile west of North Hampton centre, Portage county, Coal, (bituminous,) Portage county,	66	i:	"	66	"	"						
50 51 52 53	Cannel coal, or very highly bituminized shale, middle of the north line of Freedom, Portage county, Potters' clay, used at Stanley & Bemis' pottery, in Newton, south line of Jackson Tp., Trumbull co. Calcareous carbonate of iron, one half mile east of Jackson centre, Trumbull county,	66 66 66	44 44		"	"	"	1					
54 55	Gray sandstone, containing mineral charcoal, Lowry's quarry, Talmadge, Portage county, Potters' clay, lots 55 and 56, one half mile west of centre of North Hampton, Portage county, Limestone, like that of Sandusky, and the adjoining islands, (boulder 20 feet through,) from south west part of Boston, Summit county,	46	" 2	" 2	"	"		1					
56 57	Potters' clay, south west part of Boston, Summit county, Coal plant impressions, in shale and slaty sandstone, from H. Newbury's coal mine, north west of Talmadge, Portage county,	1 "	1	1									i
57 58 59 60	Coal, (bituminous,) Wright's mine, one mile west of Talmadge, Portage county, Coke, made in open air, from coal 59 above,	"	"	"	46	"	"						
61 62 63	Coal, (bituminous,) D. Upson's mine, Talmadge, Portage county, Coke, from the coal 61 (coked in ovens,) Talmadge, Portage county,	"	"	"	"	46							
64 65 66 67	Neuropteris, in silicious shale or slaty sandstone, from A. Whittlesey's coal mine, Talmadge, Portage co. Encrinal remains, in sandstone, from the top of the Waverly sandstone series, near Newark, Licking co.	"	ec ec	"	"	"	"	1	1			i	·
68 68	Limestone, of the coal formation, lot No. 18, Shaler's Steep, Springfield, Summit county, Argillaceous iron ore, of the coal formation, lot No. 18, Shaler's Steep, Springfield, Summit county, Coke Impression in sandstone, called "stone fruit," from a boulder, Springfield, Summit county,	"	"	"	"								j
70 71 72	Clay, made into stone ware, Springfield, Carbonate of iron, from Bankbard's old saw mill, Portage, Summit county,	"	16 46	46	"	"	"						
74	Coal, bituminous, Fink's mine, Norton, Medina county, Carbonate of iron, one mile south west of Akron, lot nineteen, Portage, Summit county, Argillaceous limestone, one mile south west of Akron, lot number nineteen, Portage, Summit co. Calcareous sinter, two hundred yards below the bridge, Cuyahoga Falle, Summit county,	" " "	« «.									•	: i
	Hydraulic limestone, from the foot of the rapids, at Cuyahoga Falls, Summit county, Argillo ferruginous limestone, from the foot of the rapids, Cuyahoga Falls, Summit county, Hydraulic limestone, after calcination, from near the lower paper mills, Cuyahoga Falls, Summit co.	66 66 86	"	66	-								
80 81	Fossil, "fruit" impression, in sandstone, Mendenhall's coal mine, one half mile south west of Tal- madge Centre, Portage county,	۲,											Ì
84	Fossil coal plant, impression on sandstone, Mendenhall's coal mine, one half mile south west of Talmadge, Portage county, Sandstone, (grindstone grit) Sperry's quarry, north line of Talmadge, Portage county,	"	"					ľ					
86 87	Coal, (bituminous) one half mile west of Greentown, Stark county, Limestone, (fossiliferous, blue,) from the coal formation, half a mile west of Greentown, Stark co. do east line of Atwater, Portage county, Fossil plants in black shale, at the saw mill, lot five, C. F., east line of Atwater, Portage county,	"	" " "	" " "	"	"	"						
89 90 91	Blende, in carbonate of iron, lot number fifty one, Deerfield, Portage county, Limestone, (black) from the coal formation, south east corner of Deerfield, Portage county, Kidney iron ore, half a mile north of Berlin centre, Trumbull county,	44 44	"	"	"	•							! !
92 93	Limestone, from the falls of Meander Creek, Ellsworth, Trumbull county, Sulphate of barytes, with iron ore, from the falls of Meander Creek, Ellsworth, Trumbull county, Clay, one half mile north of Berlin Centre, Trumbull county, Clay, containing crystals of selenite, \(\frac{3}{4}\) of a mile south east of Ellsworth Centre, Trumbull county,	" 2 1	"	"	"	"	"	1	1				; [
95 96 97	Limestone, (ferruginous) one mile south of Ellsworth Centre, Trumbull county, Coal, (bituminous) Steven's mine, north east corner of Beaver, Columbiana county, Cannel coal, Steven's mine, north east corner of Beaver, Columbiana county,	" " "	۲۲ ۲۲ ۲۲	"	"	٤,	66	1					
99 100	Limestone, (blue and black) coal formation, lot nineteen, fourth division, Canfield, Trumbull county, Coal, bituminous, coal formation, lot thirty, E. Whittlesy's mine, Canfield, Trumbull county, Coal, bituminous, C. Dermond's mine, coal formation, lot six, Ellsworth, Trumbull county, Limestone shale, of C. Dermond's mine, contains producta and other shells, lot number six, Ells-	"	"	"	"								
102 103	worth, Trumbull county, Limestone, blue, in the east part of Ellsworth, on the East Centre road, Trumbull county, do on north west part of lot No. 6, Division 4, Canfield, Trumbull county,	" "	"	"	44								
105 106	Blende ferruginous, lot 3, Division 4, Canfield, Trumbull county, Carbonate of iron, east part of tract 11, in run near the road, Jackson, Trumbull county, Coal, Ohl's mine, lot No. 22, Austintown, Trumbull county, Clay, Big Meander, in the wood south of Weathersfield, Trumbull county,	" "	"	66	"								
108 109	Carbonate of iron, lot No. 21, Hubbard, Trumbull county, Limonite, (iron ore,) lot No. 21, Hubbard, Trumbull county, Limestone, from a block in Squaw Run, near Youngstown, Trumbull county,	"	"	" "	"	"							
111	Limestone, lot No. 56, Tyler's quarry, Hubbard, Trumbull county,	66	"	"	"								

Mark on				Letter	and n	umber	of the	boxes o	of the c	ollection	ons.		
the label	Name and locality of the specimens.	A	В	C	D	E	F	G	н	I	K	L	м
	Carbonate of iron, lot No. 55, Hubbard, Trumbull county,	1	1	1									
114 115	Shale, containing impressions of plants, (calamites pecopteris, &c.,) Stevenson's mine, Poland, Trumbull county,	1	1	1	1	1	1	1	1	1	1		
117	Argillaceous iron ore, found in alluvial gravel, 4 mile above Eaton's Furnace, Poland, Trumbull co. Carbonate of iron, one fourth mile below Eaton's Furnace, Poland, Trumbull county,	1 1	1 1	1			-	,		•	•		
118 119	Limonite, one fourth mile below Eaton's Furnace, Poland, Trumbull county, Iron ore, nodular, containing calamine and blende, lot No. 40, Youngstown, Trumbull county,	2 1	1 1	1 1	1 1	1	1						
121	Argillaceous iron ore, (workable,) from the coal formation, No. 40, Youngstown, Trumbull county, Fine clay, coal formation, No. 15, Coitsville, Trumbull county,	1 2 1	2 1	1 2 1	1 1 1	1	1	١.					
- 123	Yellow clay, in the canal, near Maj. Montgomery's, Coitsville, Trumbull county, Carbonate of iron, containing blende, from the coal formation, one mile from Youngstown, up Mill Creek, Trumbull county,			•	*	1	•	1					
124 125		1	1										
127	Iron ore carbonate of iron, from the coal formation, Youngstown furnace, Trumbull county, """ """ "" lower bed, Youngstown furnace, Trumbull county, Blue clay, used in glazing, """ "from the Big Meander, Ellsworth, Trumbull county,	2	2	1 1	1	1	1						
129 130	Clay, used for making ware, road 2 miles east of Canfield, Trumbull county, "lot No. 30, Youngstown, Trumbull county,	1	1 1	1 1	1 1	1	1	1	1				
132	Cannel coal, lot No. 11, south west part of Boardman, Trumbull county, Clay, from lot No. 20, Milton, Trumbull county,	1	1	1 1	1								
134	Fine clay, " 40, used at Stanley & Bennis' pottery, south line of Jackson, Trumbull county, Carbonate of iron, lot No. 29, Deerfield, Portage county,	1 1 1	1	1									
136	Bituminous shale, or rather impure cannel coal, one half mile west of Charleston centre, Portage co. Calcareous tufa, alluvial deposit, from a mineral spring, one fourth mile east of the north west corner of Edinburgh, Portage county,	ı	1	1									
Ax	Columbus limestone, Sullivant's quarries, Franklinton, Franklin county, Calcareous tufa,	1 1		1	1	1	1	1	1	1	1	1	1
Bx Cx	Belerophon? in limestone, Sullivant's quarries, Franklinton, Franklin county, Dipleura Dekayi limestone, do do do do	1		1	1	1	1						
Ex	Asaphus myrmecophorus, do do do do do Encrinal spines, do do do do do	1 3 1	}	1									
Gx	Spirifer, do do do do Leptæna, do do do do Leptæna depressa, do do do do	1 1		1	1 1		ļ				•		
Hx	Atrypa, do do do do Cyathophyllum, do do do do	1		1 1	1 1	1	1	1	1				
Kx Lx	Favosite, do do do do Gorgonia, do do do do	2 2		1 1	1			_					
1	Pentamerus, (cast of) Sullivant's quarries, Franklinton, Franklin county, Chert, Sullivant's quarries, Franklinton, Franklin county, Fossil fruit, in sandstone, from the coal formation, Talmadge, Portage county,	1 1		0	1								
Ox	Lepidodendron, on sandstone, from the coal formation, Talmadge, Portage county, Pecopteris, on sandstone, from the coal formation, Talmadge, Portage county,	1 1		1	1								
Qx R x	Calamite, from sandstone, from the coal formation, Talmadge, Portage county, Mineral charcoal, in sandstone, from the coal formation, Talmadge, Portage county,	1 · 1 2											
ļ	Fossil coal plants, in sandstone, from the coal formation, Talmadge, Portage county, Granite, from a boulder, from Moses' quarry, 21 miles north west of Portsmouth, Greenstone, from a boulder, Euclid, Cuyahoga county,	1 1		1	1	1	1	1	1	1	1	1	1
	Limestone, white, from the coal formation, 4 miles from Jackson furnace, on the road to Jackson C. H. Marl, Cleveland, Cuyahoga county.	1 1											
	Marl, Yellow clay,	1										:	
]:	White clay, Burnt clays, in balls,	1 11 16											
	Clays, from the north east counties of the state, Coke, of Brownsville coal, Coal,	1 1		1									
	Calcareous spar, from the slate of copperas mountain, Ross county, Sulphate of barytes, in brown spar, from the geodes in slate, Worthington, Franklin county,	1 1 1		1	1	1	1	1	1	1	1	1	
" B B	Shale, Marietta run, Bern township, above the coal, Beebe's, below mouth of Federal creek, Athens co. Ore from shale A, Sandstone, valley of Hocking, 3 miles below Beebe's, Athens county,	1 1						٠					
" D B	Limestone, valley of Hocking, 3 miles below Beebe's, Athens county,	1											
"FB "GB "HB	Sandy limestone, Barrow's mill, Federal creek, Athens county, Manganesian iron ore, Carthage township, Athens county,	1 1 1											
" K B	Bear Wallow, near section 3, Carthage township, Athens county, valley of Hocking, 3 miles below Beebe's, Athens county, Shale, Doan's, 1 mile below Beebe's, Athens county,	1 1	; }										
"IB	Shale, red, from the shales and slaty standstones, below thick limestone, opposite Beebes' tavern, Athens county,	1	:										
	Spirifer, from the limestone near Xenia, Greene county, Productus, from the limestone near Xenia, do do do do do do do	1	1	1								•	
Gw7	rerebratula, from the limestone near Xenia, do do do do do do do do do do do do do	1	1 0	ó									
[]	Cyathophyllum, four species, from the limestone formation, near Xenia, Greene county, Madrepora,	4 1 1											
(Cyathophyllum, in limestone, from Sullivant's quarry, Franklin county, Chert, in a knot of wood, Coralline, from the limestone near Lebanon, Warren county,	1 1											
(Coccinopora, from the limestone near Lebanon, do do e. w. 30, Columnaria? projections, Springfield, Clark county,	1											
	e. w. 32, e. w. 31, like 30, Springfield, Clark county,	1											
ļ	Madrepora, from same place, do astrea, Springfield, Clark county,	1 1											
	Eschara and milleporites, several species, West Union, Adams county, Eschara stomatopora, Dayton, Montgomery county, Calemanora species, Socionafield, Clark county	2 1											
.	Calamapora spongites, Springfield, Člark county, Fungia, do do do Favosite, Franklinton, Franklin county, Ohio,	1											
ľ	do Frankfort, do do Ky. do Franklinton, do do Ohio,	3 3		٠.									
	do Springfield, Clark county, Gorgonia, Franklinton, Franklin county,	3 1											
	Sarcinula, Springfield, Clark county, Cyathophyllum, Springfield, Clark county, do West Union, Adams county,	3 1	<u>}</u>							l			
	uo vvest Omon, Adams county,		l —	<u> </u>				!			<u> </u>		